HVT 10 RCR - HVT 300 RCR

Broadband High-Voltage Dividers

broadband
voltage divider
with capacitive compensation

HVT 40 RCR

The Broadband high-voltage dividers series HVT...RCR are state-of-the-art measuring equipment with excellent high-frequency transmission characteristics. The high-voltage impedance consists of a precise metal film resistor and a high-voltage capacitor with series damping resistor in parallel.

The measuring cable with the termination network is an essential part of the divider. The termination network can be adjusted for an oscilloscope input impedance of 1 MΩ // 10 - 30 pF.

The divider can also be used for high-voltage dc measurement with a digital voltmeter (DVM). Connecting a resistor Rp = 1.11 MΩ in parallel to the input terminals of the DVM means that the load resistance at the divider output will be also 1.0 MΩ.

Options	
Amplification output signal AC, DC	
amplification / attenuation	customer specific
signal input	BNC
signal output	BNC
measure output	BNC
power supply	+/- 15 V
In shielded alu case B x H x T	120x60x40 mm
Mounting holes	4 x
Mounting on flange plate	
Customer specific	
DC ratio	
Customer specific	

Technical Specification:

HVT *** RCR	10	20	40	80	120	160	240	300	Einheit
Rated input voltage:									
DC voltage	11	22	40	80	120	160	240	300	kV
AC voltage eff.	8	15	30	60	90	120	180	230	kV
Pulse voltage1.2/50µs	20	40	100	160	200	250	360	480	kV
Divider ratio (DC) ± 1%	1000:1	2000:1	2500:1	5000:1	5000:1	5000:1	5000:1	5000:1	
HV-resistor	20	40	150	270	180	240	360	400	MΩ
HV-capacitor	75	82	50	75	180	140	190	220	pF
Rise time	15	15	15	25	30	35	48	60	ns
Bandwidth	23	23	23	14	12	10	7,3	5,8	MHz
Dimensions :									
Socket ∅ / L*B*H	112*60*32	112*60*32	180	260	360	360	-	-	mm
Undercarriage L*B	-	-	-	-	-	-	1,2x1,2	1,2x1,2	m
Wheels / lockable	-	-	-	-	-	-	4 / 2	4 / 2	
Height	240	320	360	690	1080	1350	1880	2200	mm
Weight	1,5	2,5	5.0	8.5	12	20	40	50	kg
Cable length	2	2	5	10	10	10	20	20	m
Environment Conditions:									
Temperature range	5 °C - 40 °C								
Temperature error	-5 °C at 40 °C < 0.2 %								
Relative humidity	Maximal relative humidity 80 % for temperature up to 31 °C, decreasing linearly to 50 % at 40 °C								
Atmospheric pressure	High up to 1000 m above see level								

HVT 2.5/10/20 RCR

HVT 40 RCR

HVT 80/120/160 RCR

HVT 240/300 RCR